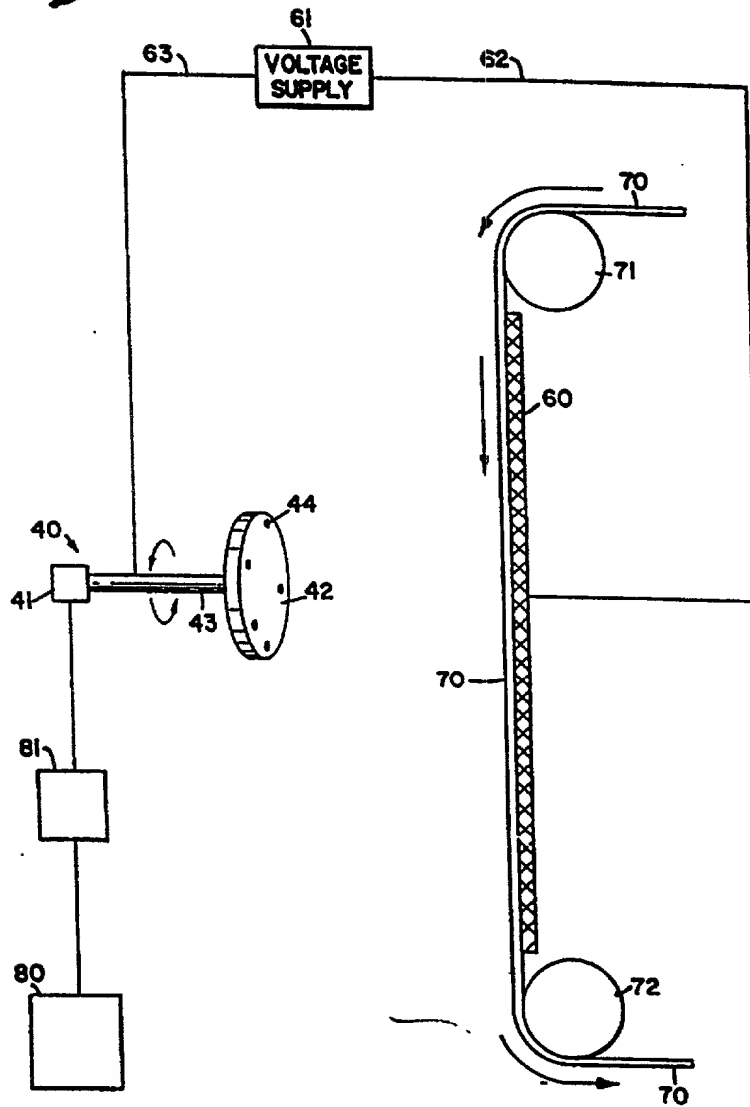
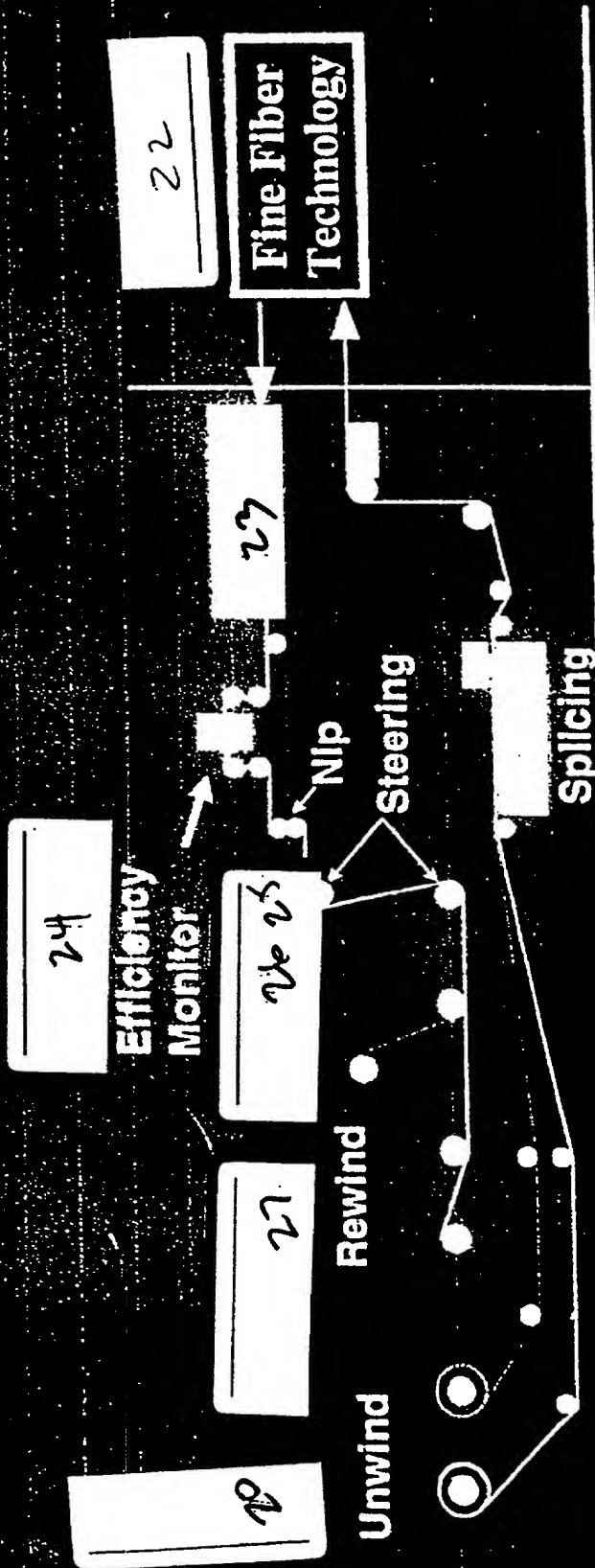


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FIG. 1



Fine Fiber Technology



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T.M. Weik
8 Dec 95

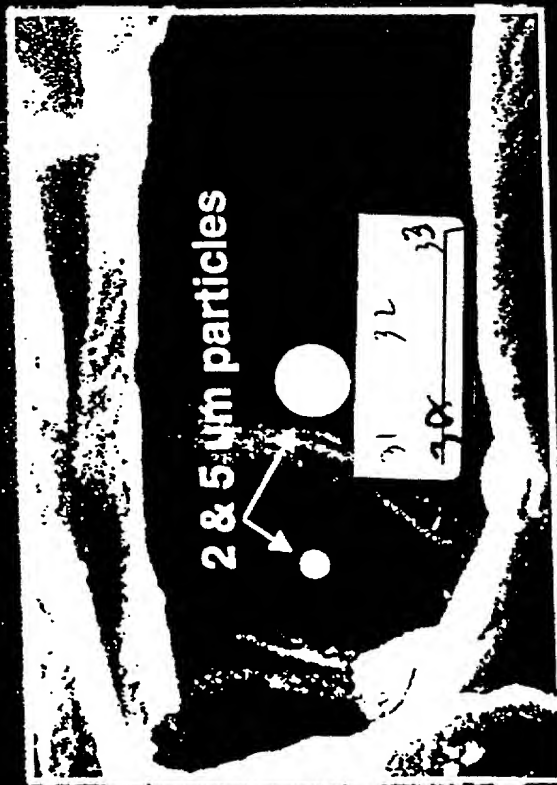
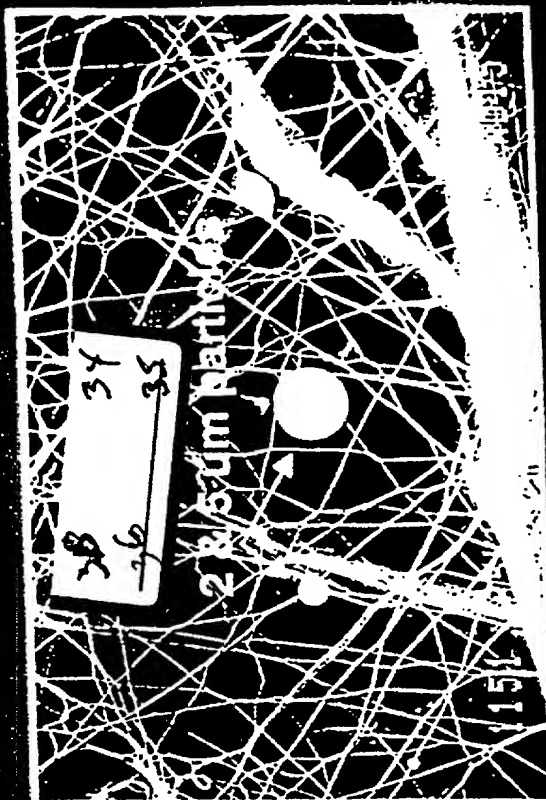
24

28

FM 2

Ultra-Web®

Cellulose Media



2,000 X Scanning Electron Microscope Images

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ALC

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Katz Analytical Services, Inc.
1191-20C-3, Sample #: 1, Angle: 65

XPS Multiplex

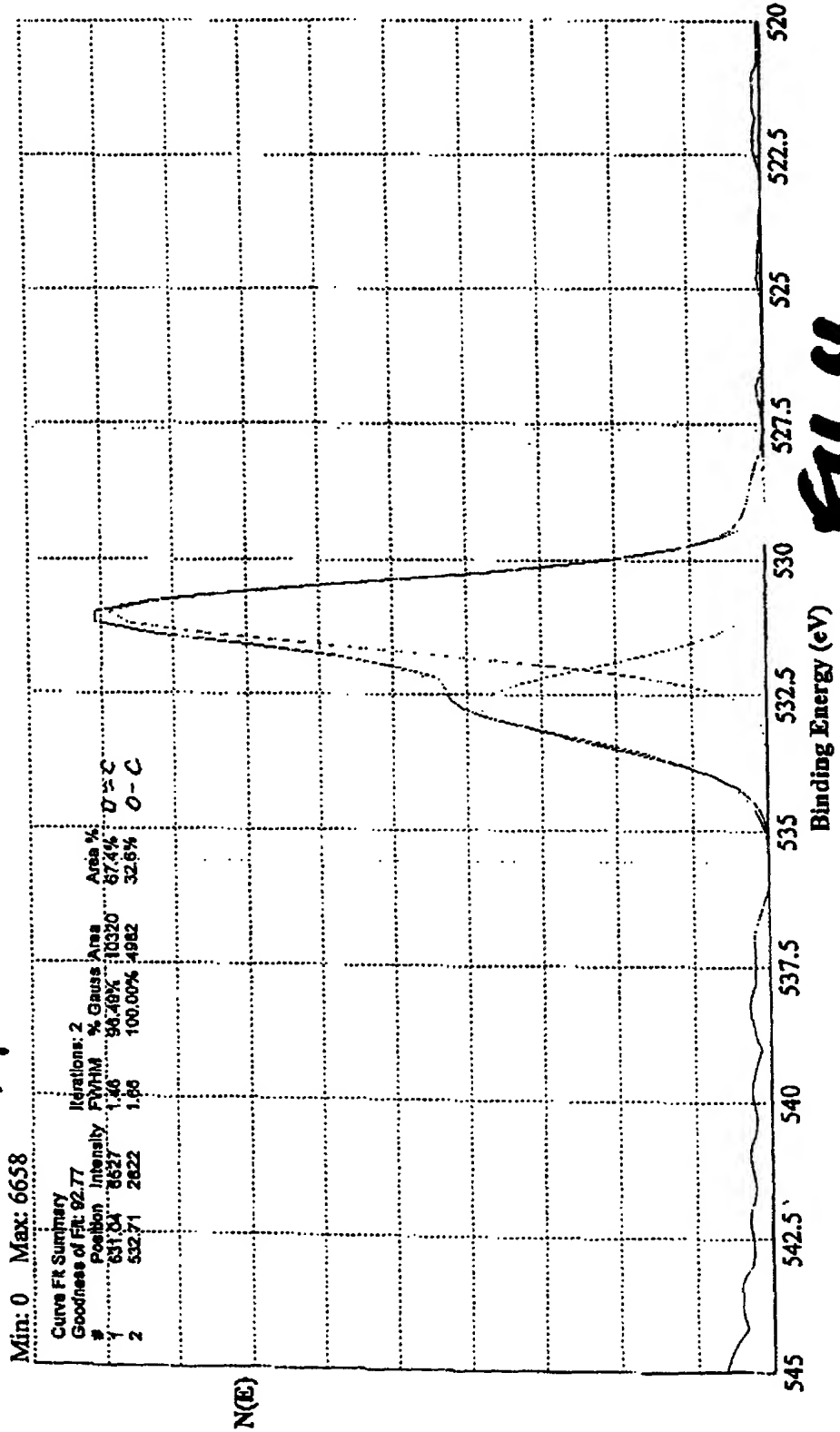
O 1s

EV/Step: 0.2 eV, Time/Step: 50 mSec, Sweeps: 12

Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig 4

ESCA O 1s Spectra for Samp 6A As Spec



File 4

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Katz Analytical Services, Inc.
1191-20C-4, Sample #: 1, Angle: 65

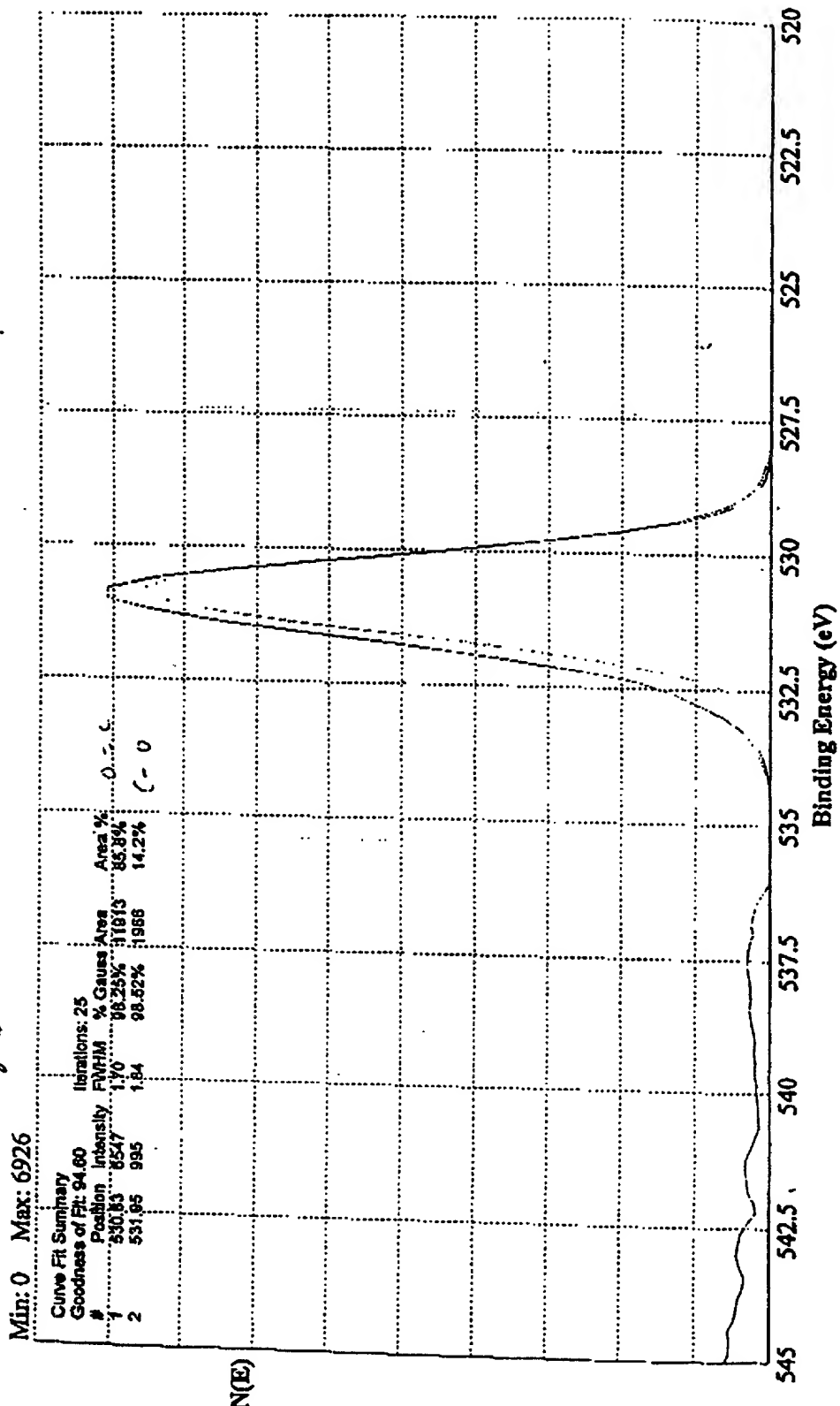
XPS Multiplex

O 1s

EV/Step: 0.2 eV, Time/Step: 50 mSec, Sweeps: 12

Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig 5. ESCA O 1s Spectra for Heat-Treated Sample 6A



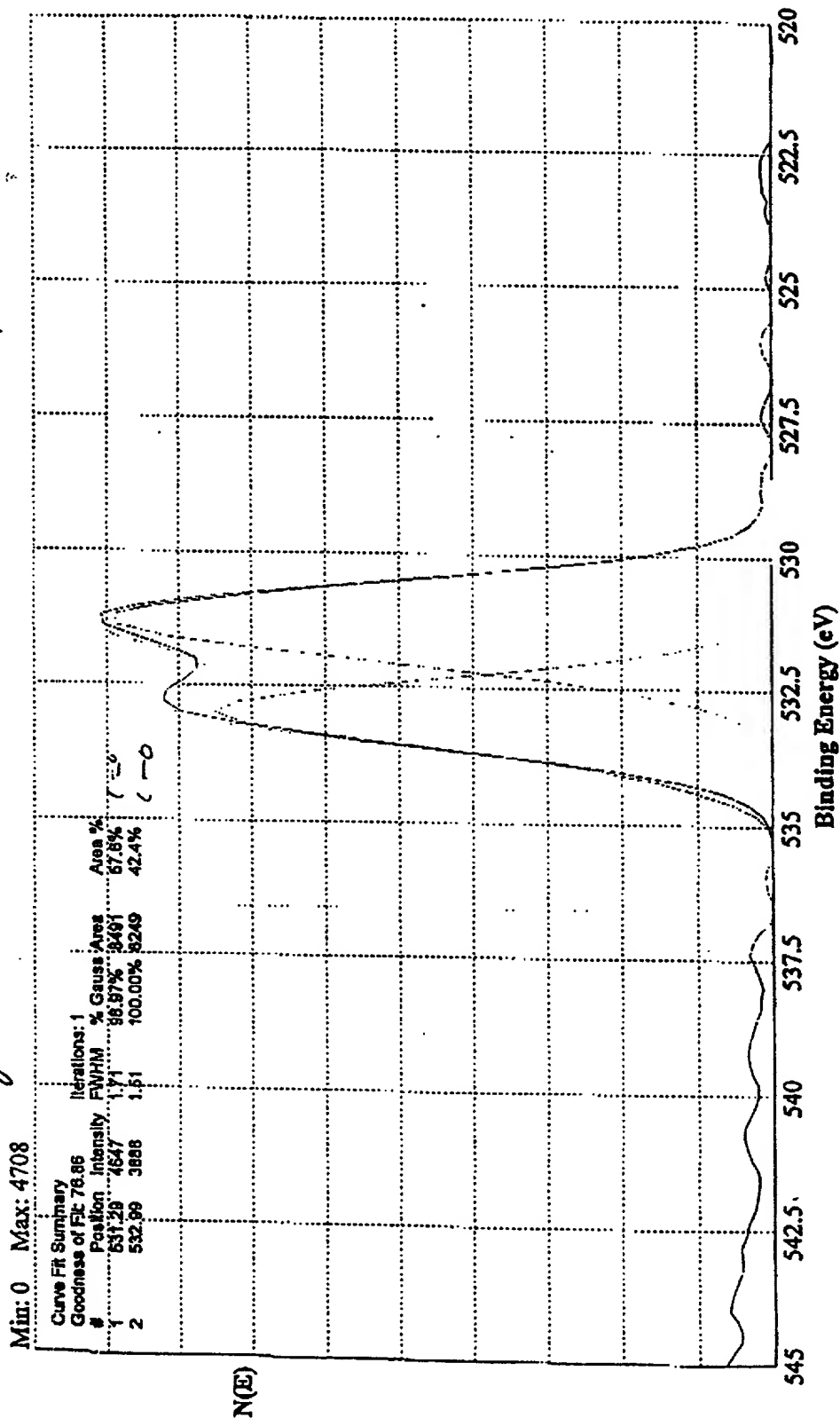
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Katz Analytical Services, Inc.
1191-20C-5, Sample #: 1, Angle: 65

XPS Multiplex
O 1s

EV/Step: 0.2 eV, Time/Step: 50 mSec, Sweeps: 12
Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig. B, ESCA O1s spectra for As-Span Example
bb



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Katz Analytical Services, Inc.
1191-20C-6, Sample #: 1, Angle: 65

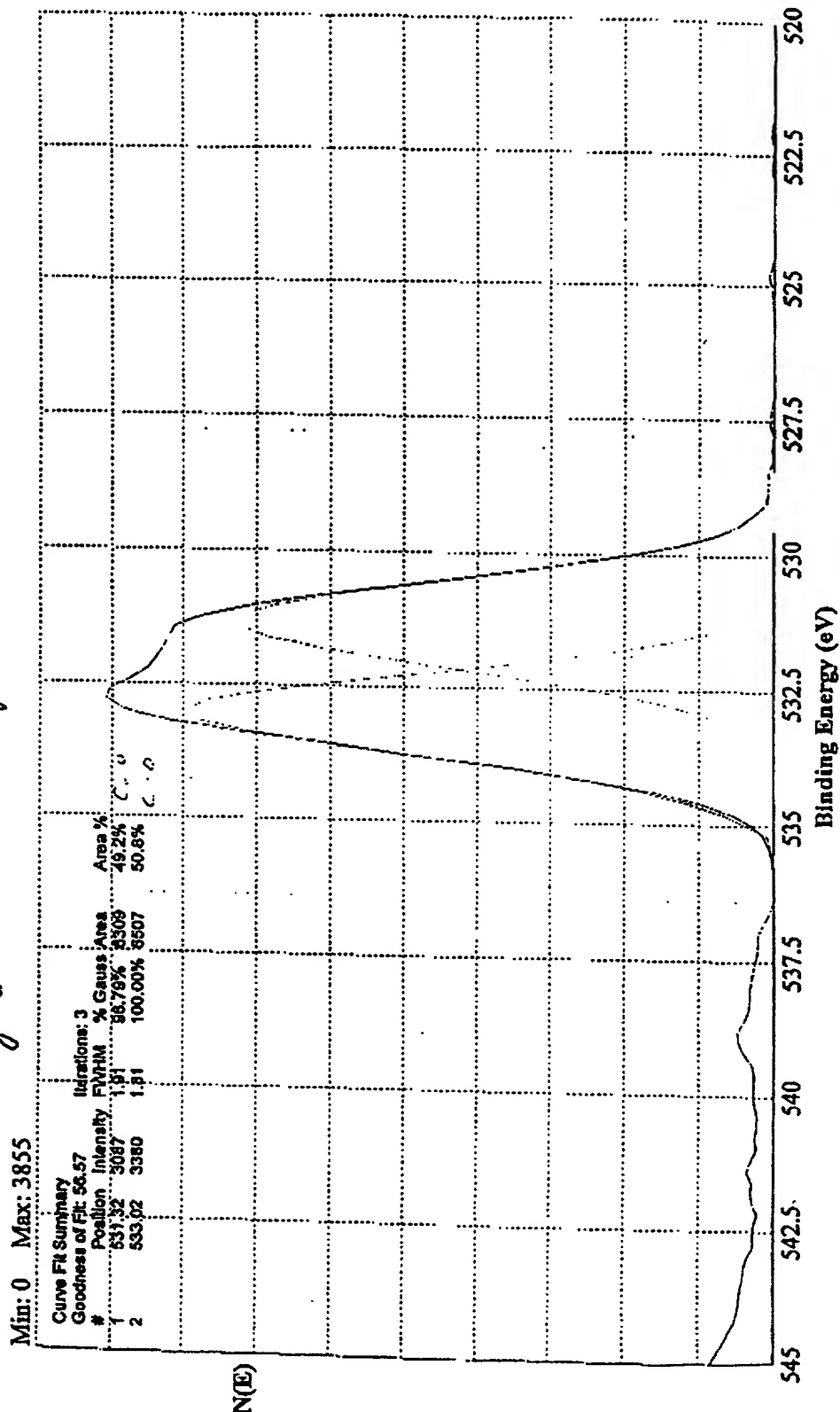
XPS Multiplex

O 1s

EV/Step: 0.2 eV, Time/Step: 50 mSec, Sweeps: 16

Source: AJ, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig 1 ESCA O1s Spectra for Heat-Treated Sample 6B



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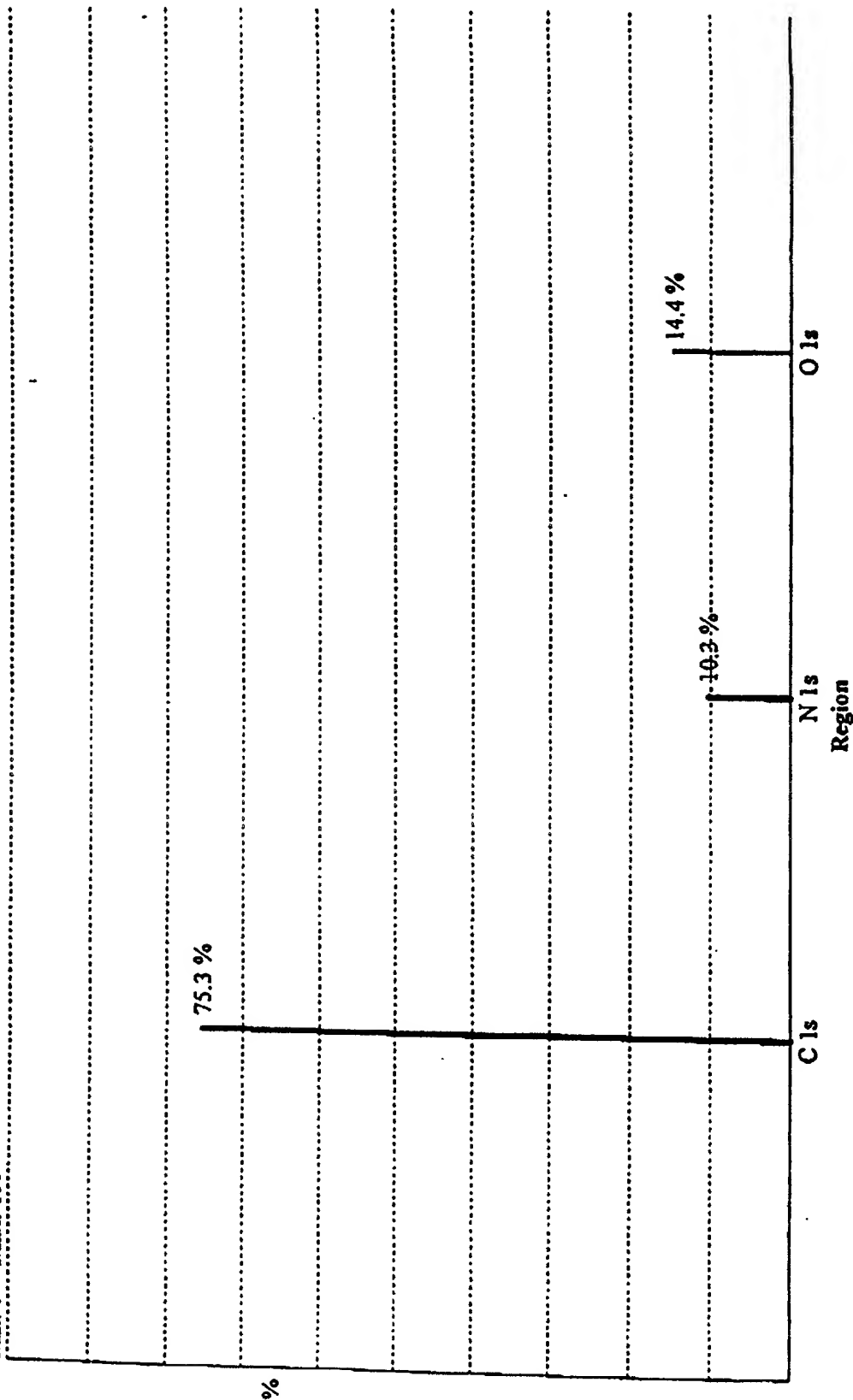
Katz Analytical Services, Inc.
1191-20C-3, Sample #: 1, Angle: 65

XPS Multiplex

Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig 8. ESCA Multiplex for As-spun Sample 6A

Min: 0 Max: 100



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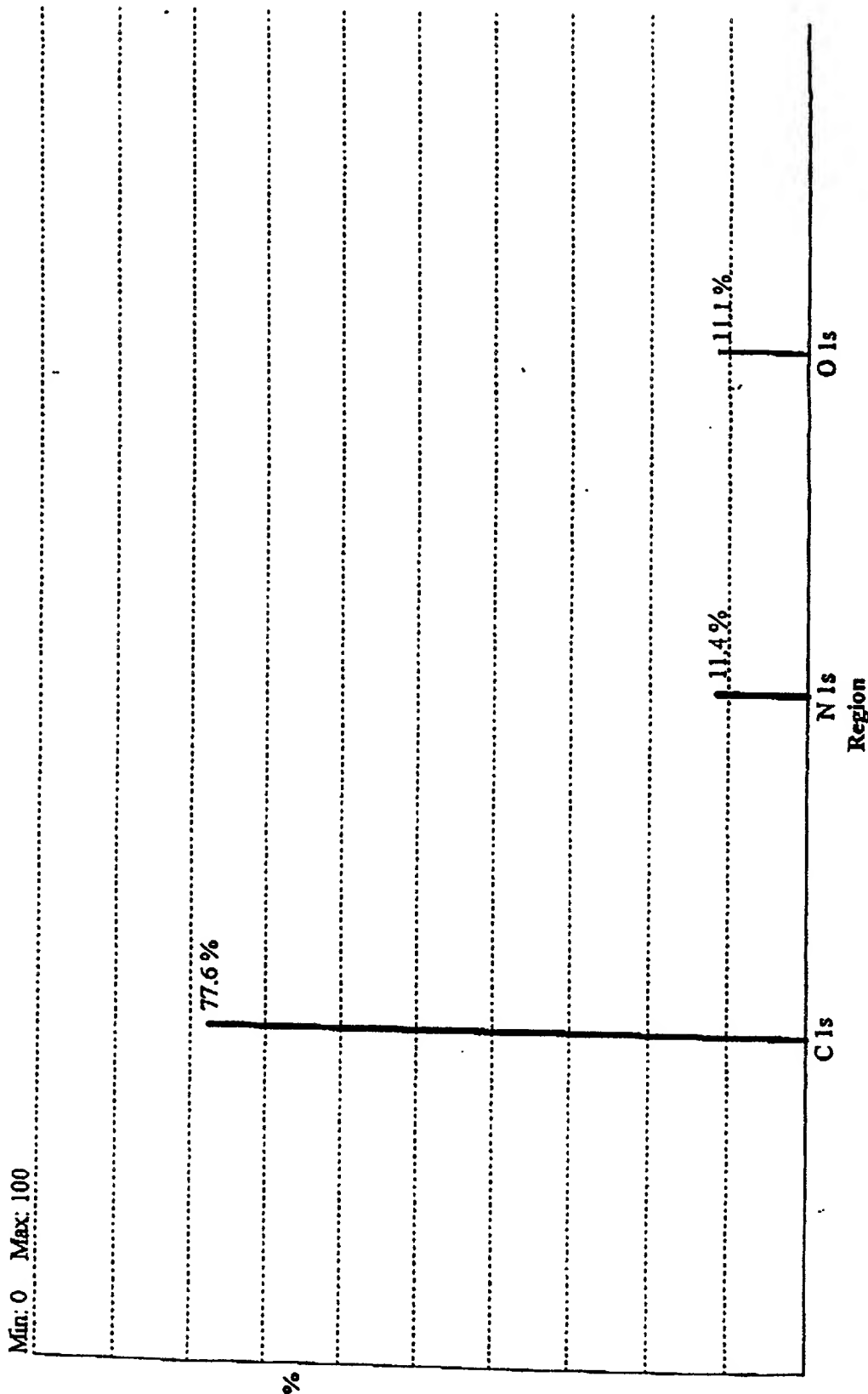
Katz Analytical Services, Inc.
1191-20C-4, Sample #: 1, Angle: 65

XPS Multiplex

Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig 9.

ESCA Multiplex for Heat Treated Sample 6A



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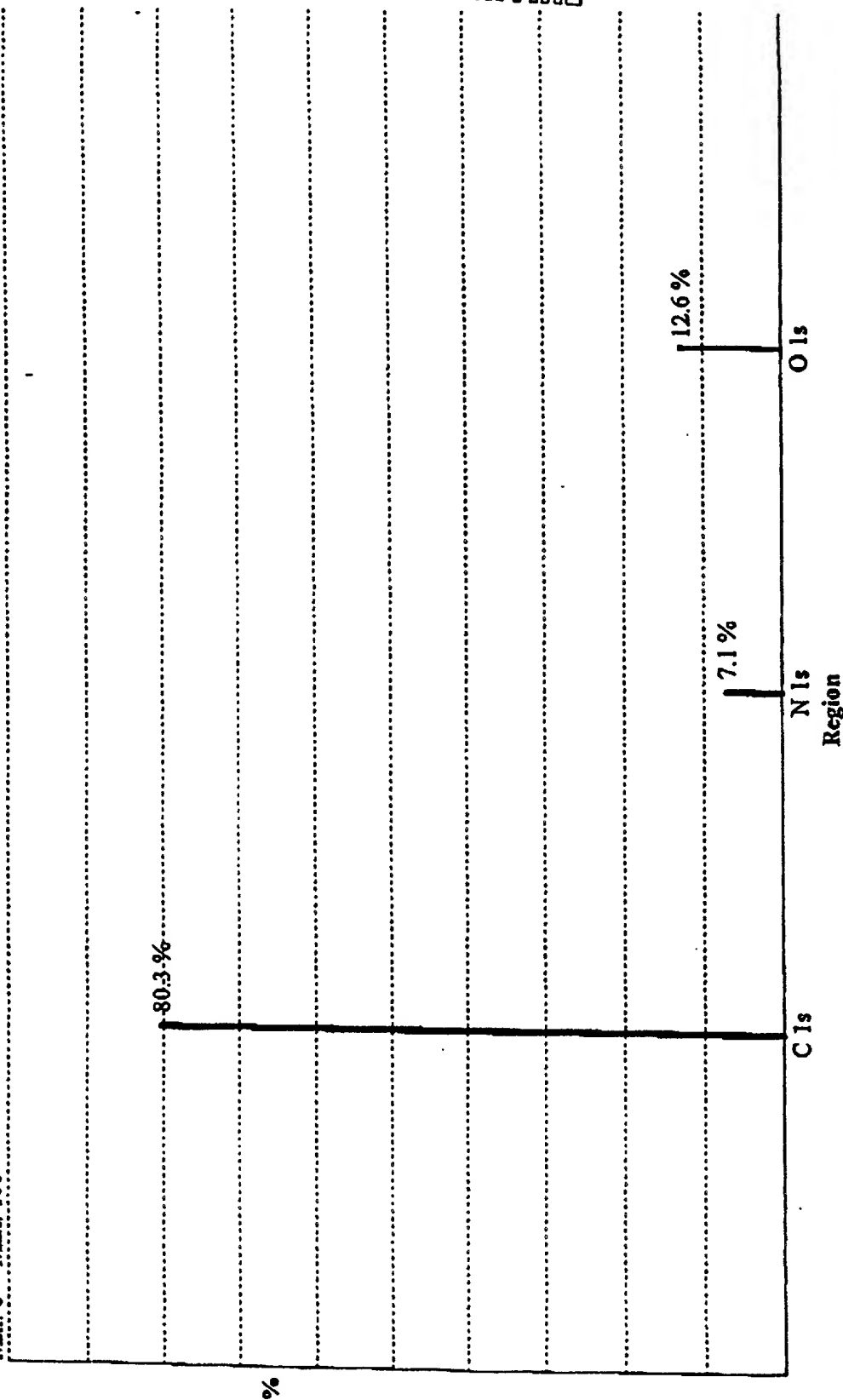
Katz Analytical Services, Inc.
1191-20C-5, Sample #: 1, Angle: 65

XPS Multiplex

Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig 10 ESCA Multiplex for As-Span Sample 66B

Min: 0 Max: 100



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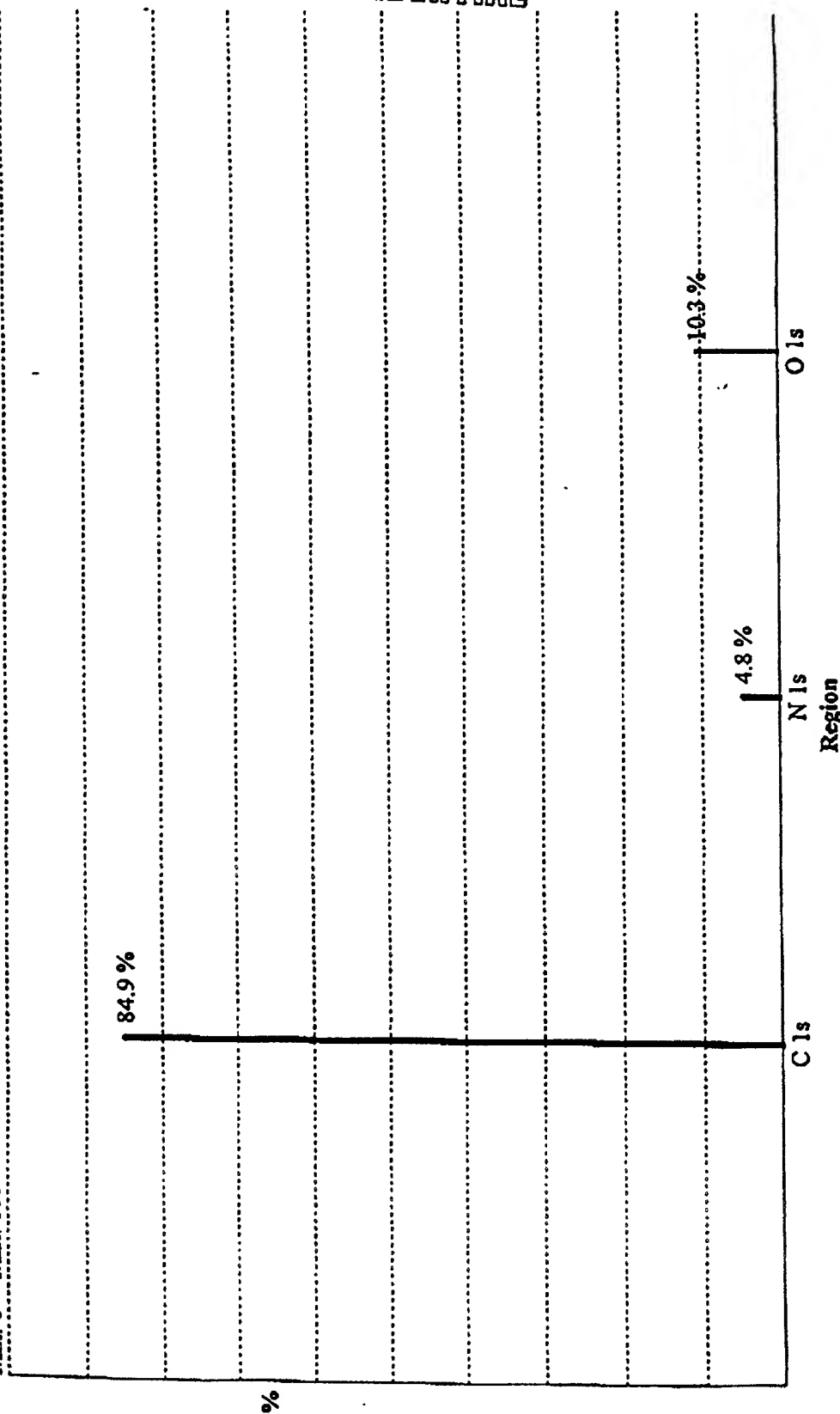
Katz Analytical Services, Inc.
1191-20C-6, Sample #: 1, Angle: 65

XPS Multiplex

Source: Al, Pass Energy: 71.55 eV, Work Function: 4.1 eV

Fig 11 ESCA Multiplex for Heat-Treated Sample 6B

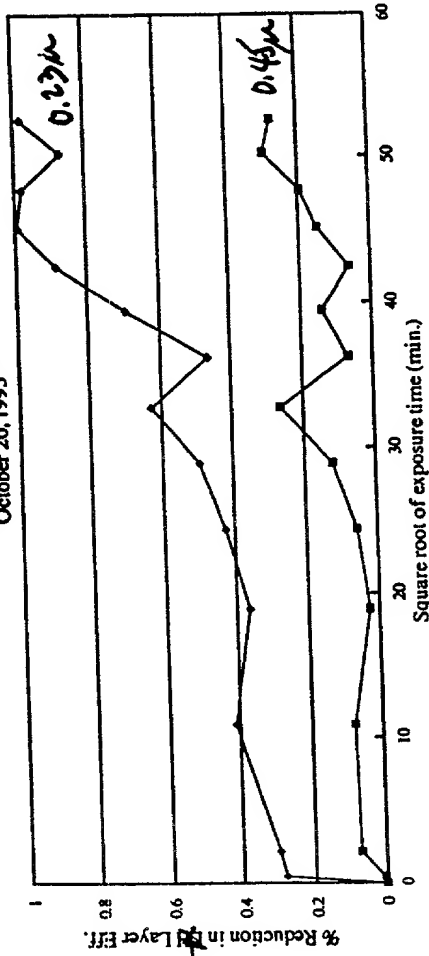
Min: 0 Max: 100



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UltraWeb Long Sock

October 26, 1993



Hot
water
probe
in
field
methods

Fig 12

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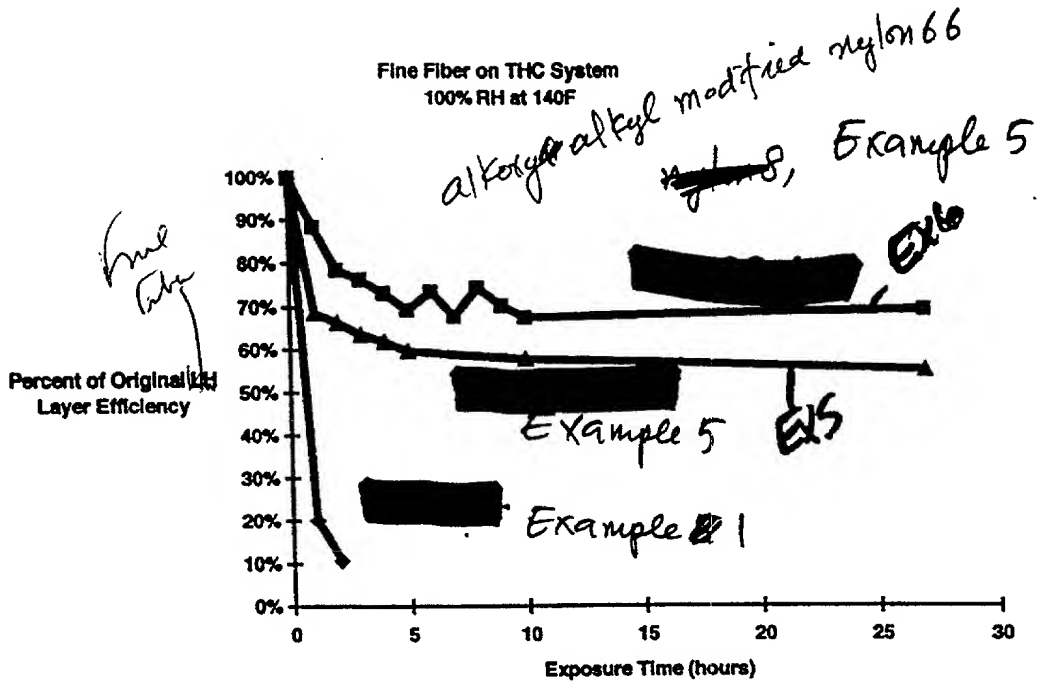
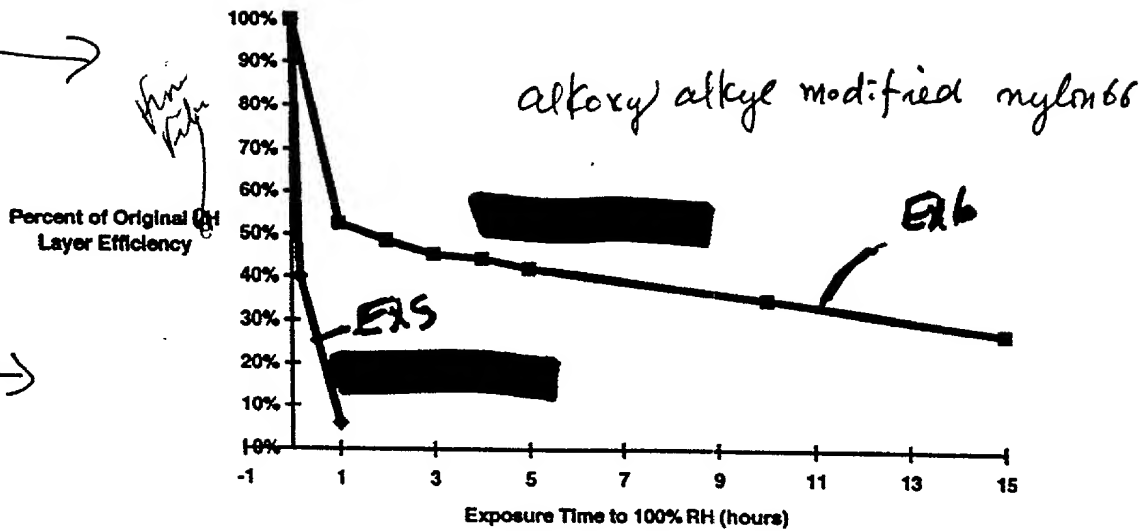


Fig. 13

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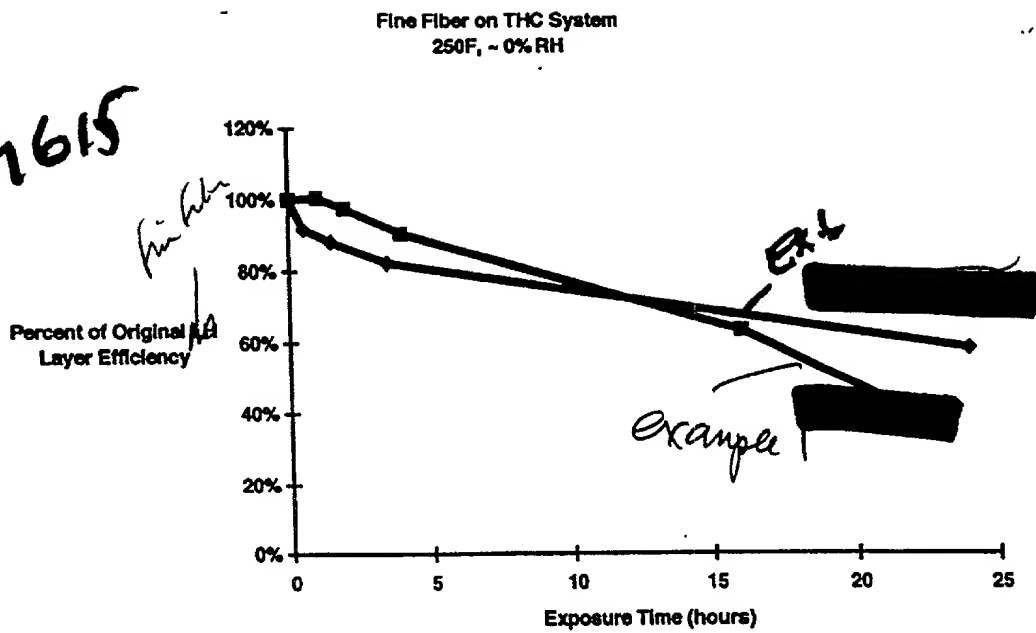
FL 14

Fine Fiber on the THC System
160 F at 100% RH



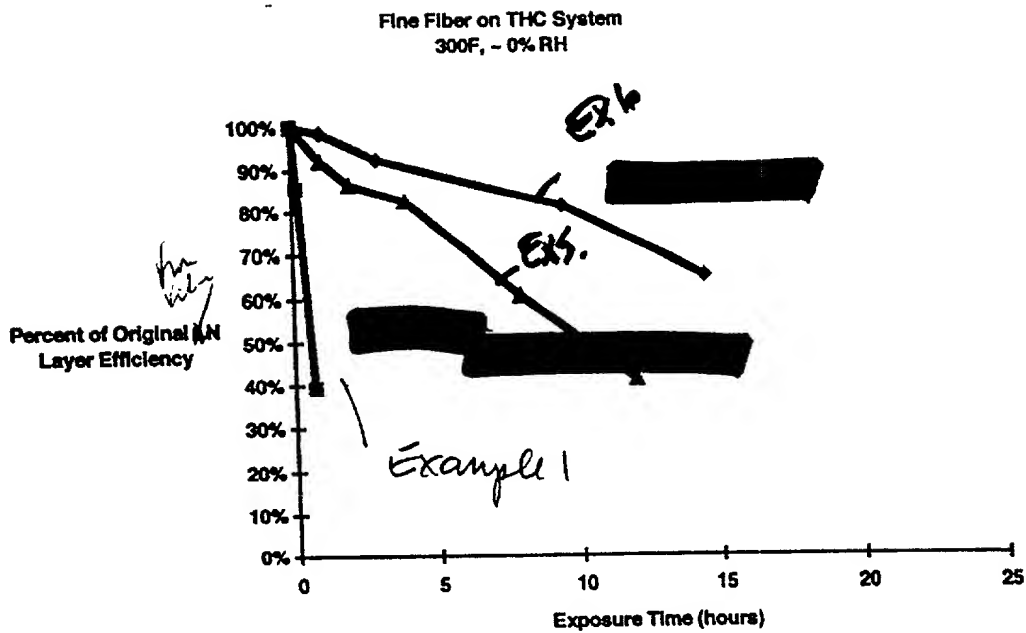
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F1615



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Fig 16



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Sample: 1191-19C-6

Size: 9.1500 mg

Method: Polymer Samples

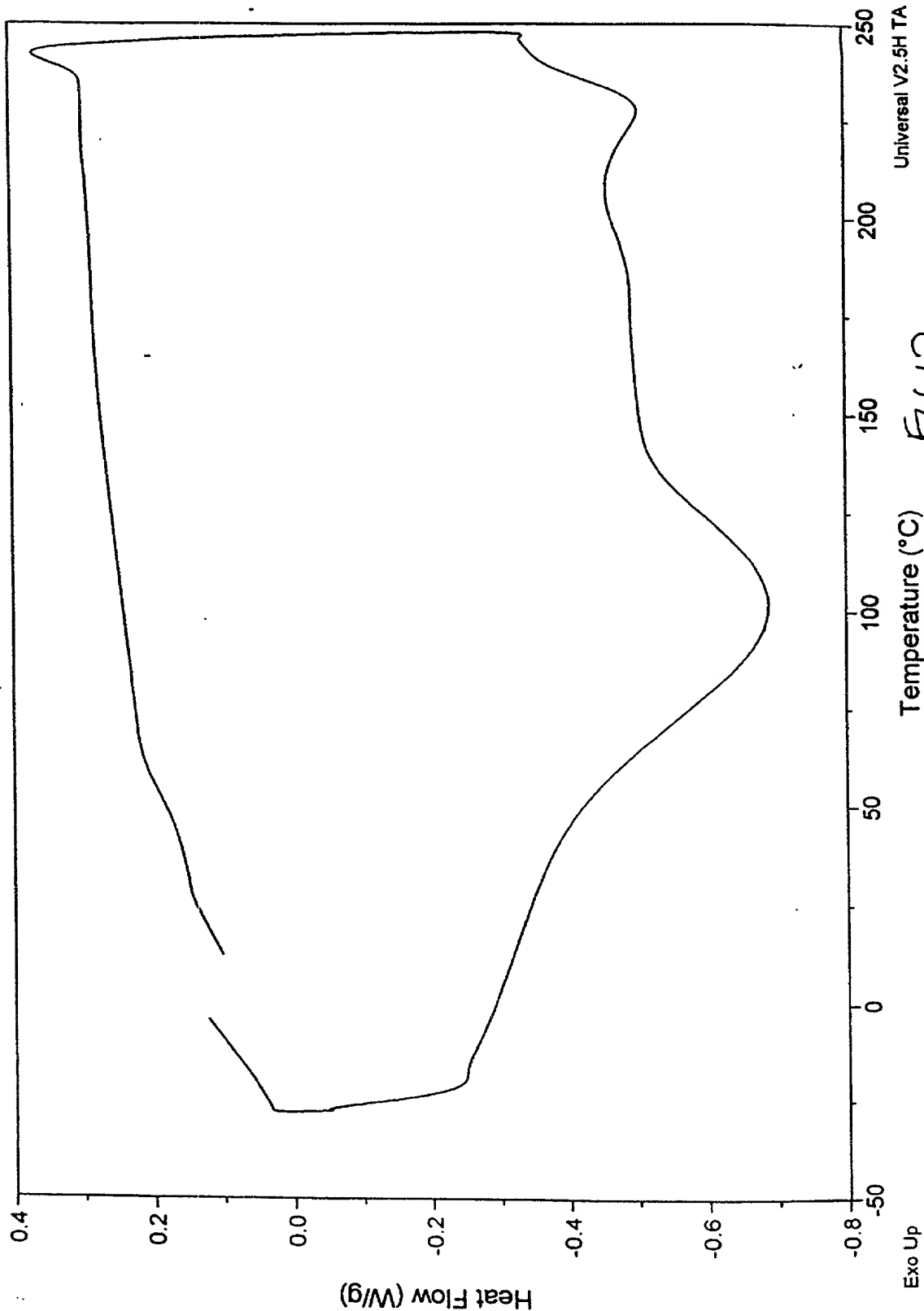
Comment: Material characterization

100% modified

DSC nylon

66

Me H



Universal V2.5H TA Instruments

FL617

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Sample: 1191-19C-6

Size: 9.1500 mg

Method: Polymer Samples

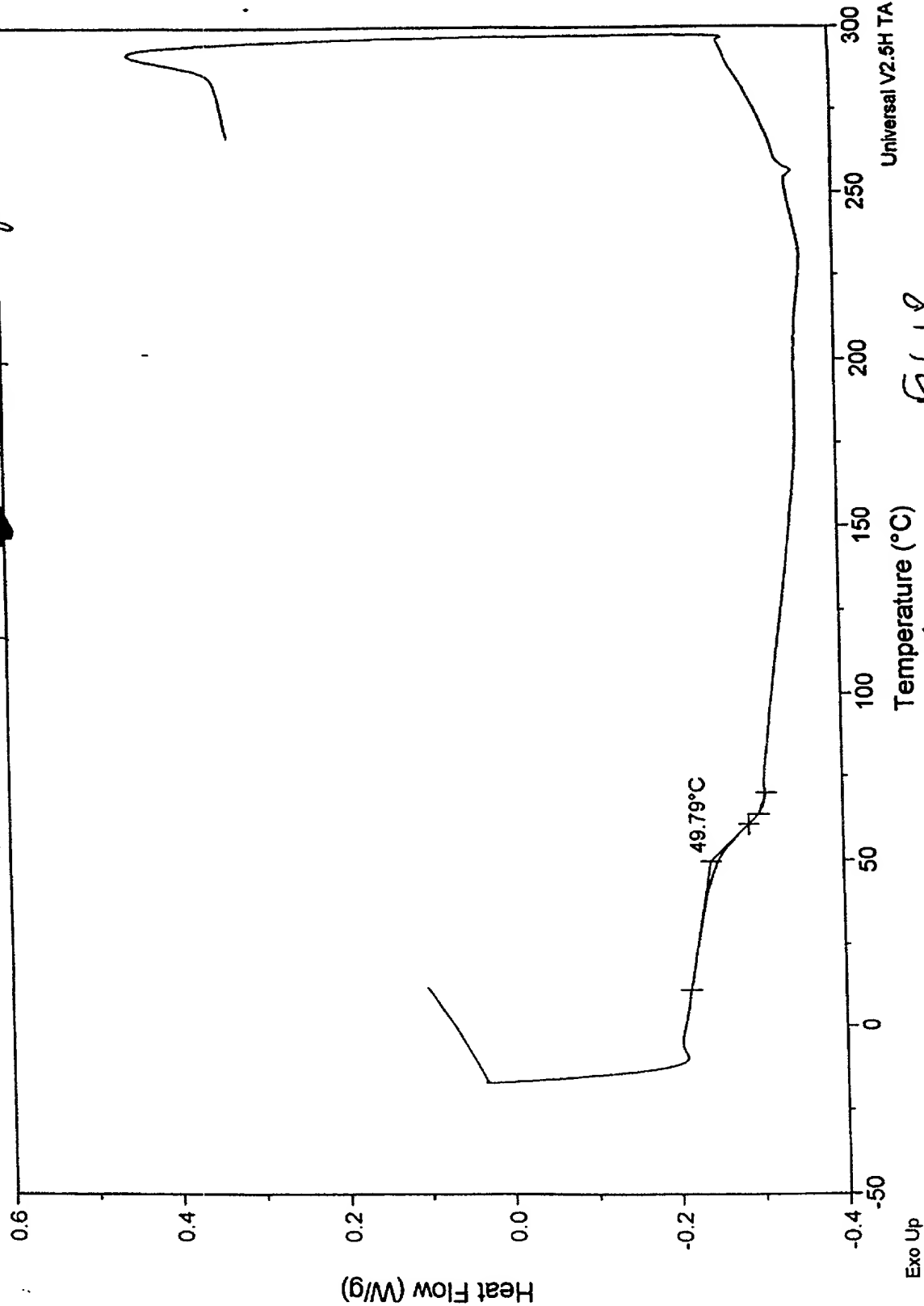
Comment: Material characterization

2nd Melt

DSC

nylon

100% modified 66 - After Fully cross-linked



Universal V2.5H TA Instruments

Fig 18

Exo Up

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Sample: 1191-19C-7

Size: 9.8400 mg

Method: Polymer Samples

Comment: Material characterization

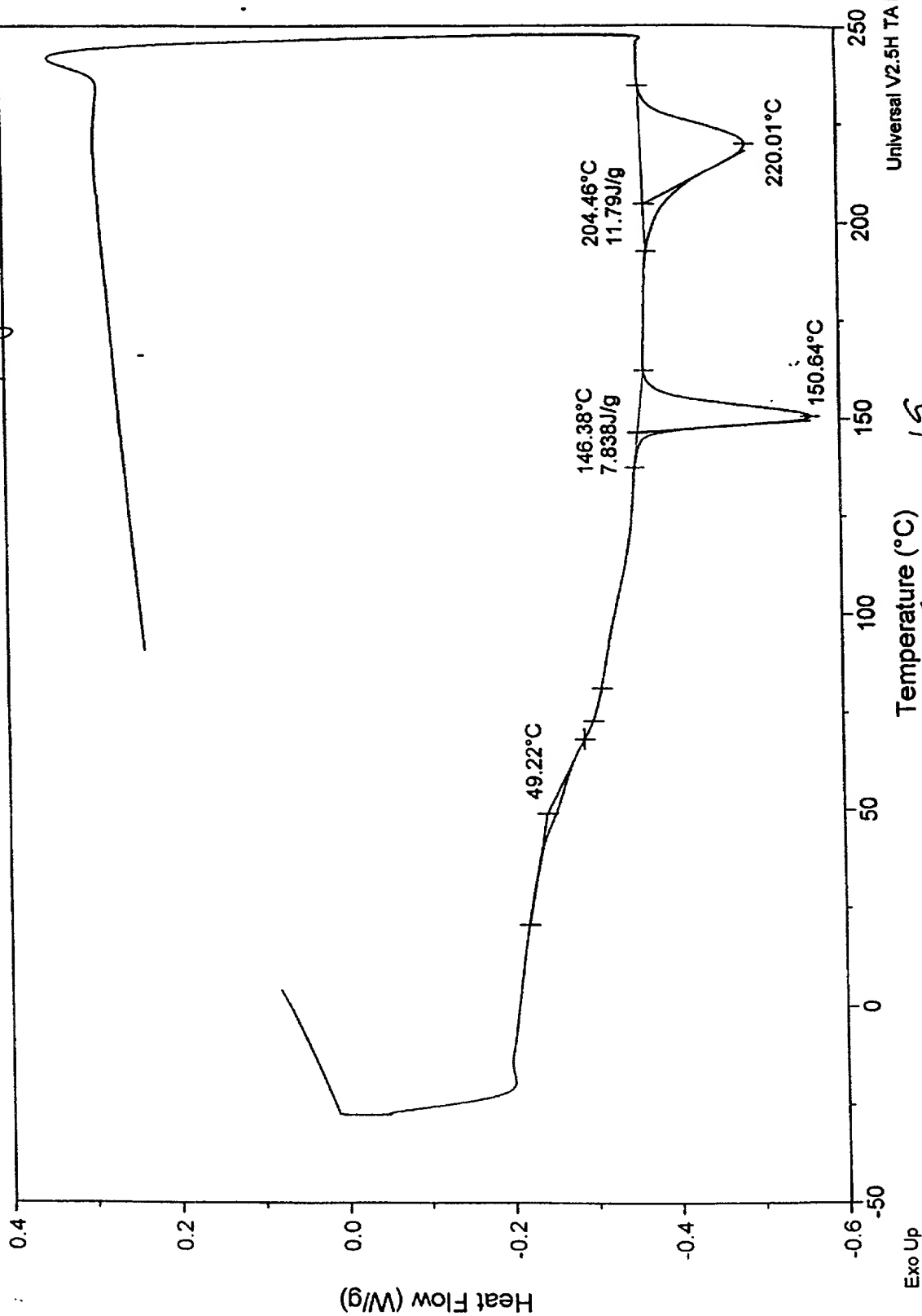
Example 6

1st Melt

DSC

polymer

70% modified 66:30% co-polyamide



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Sample: 1191-19C-7
 Size: 9.8400 mg
 Method: Polymer Samples
 Comment: Material characterization

Example 6 2nd melt DSC
 70:30 after Full Cross-linking

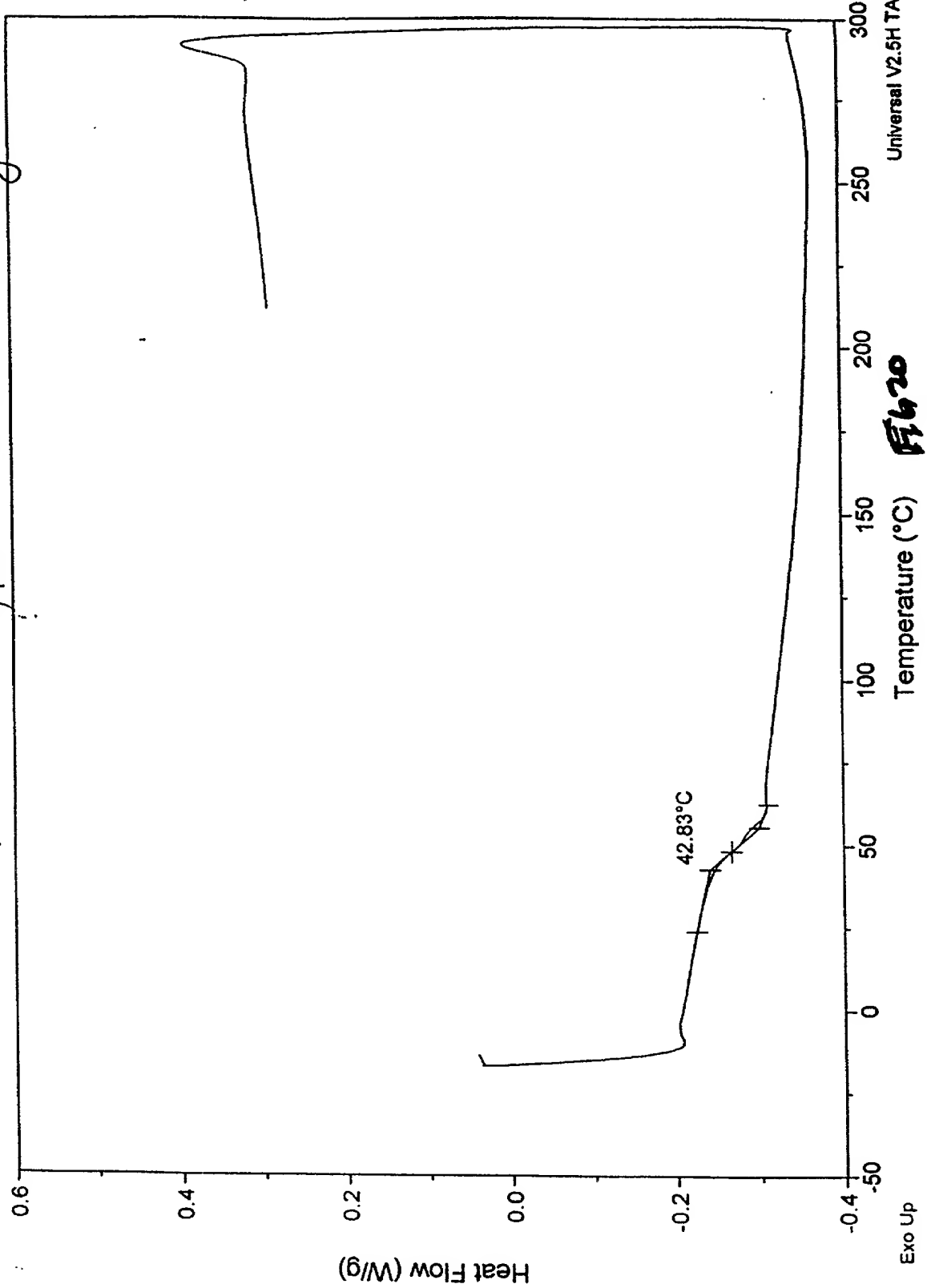


FIG. 21

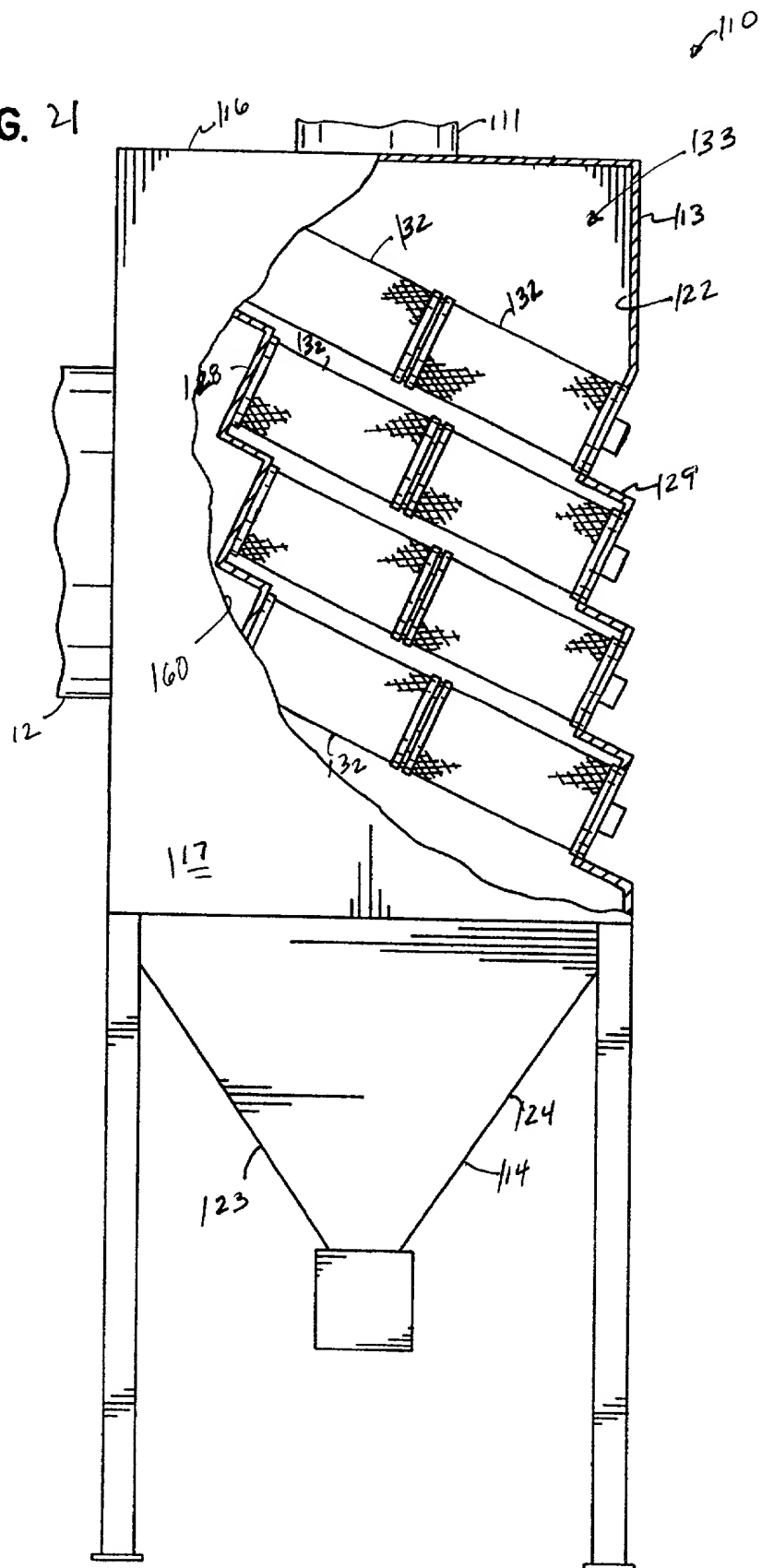
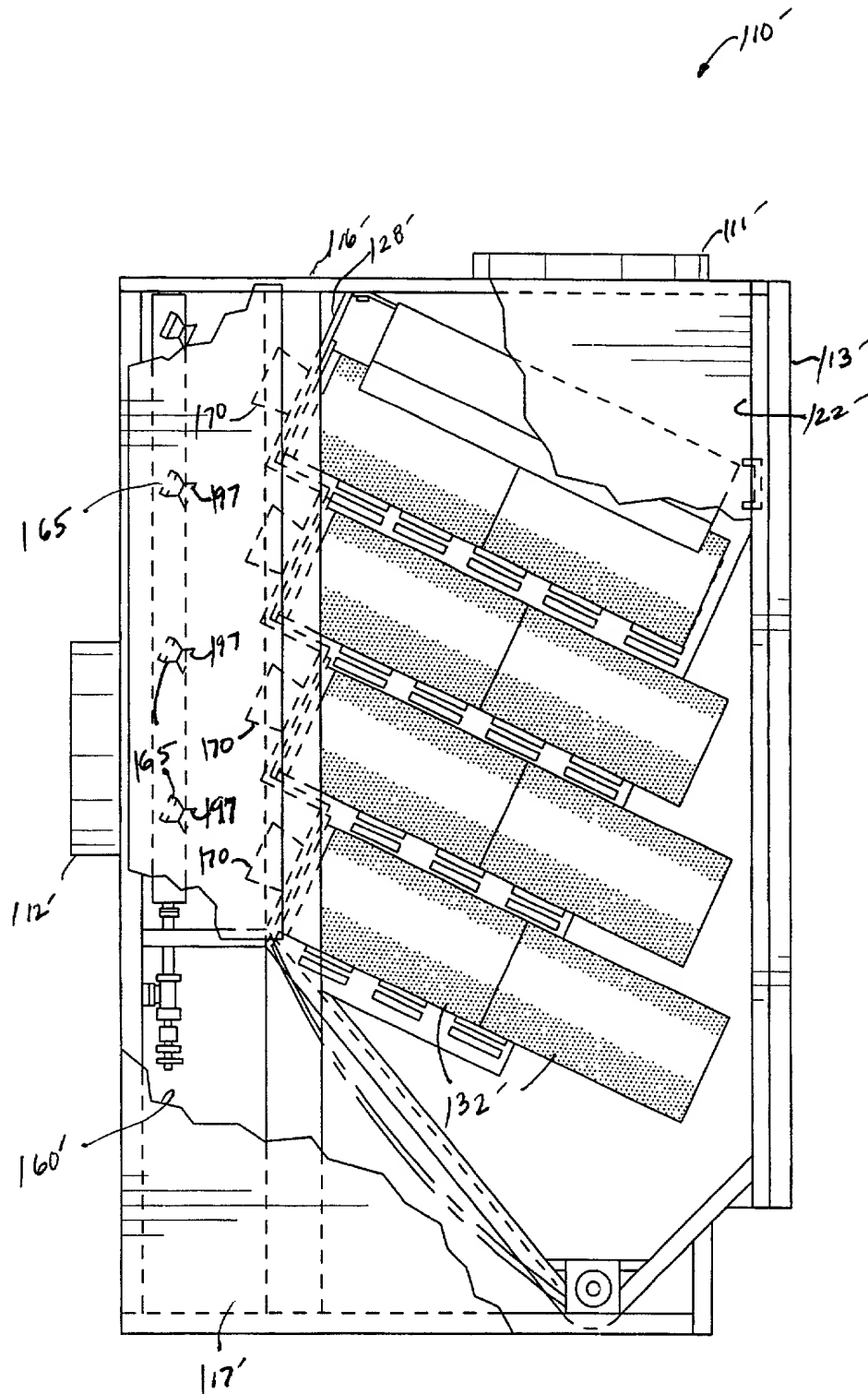


FIG. 22



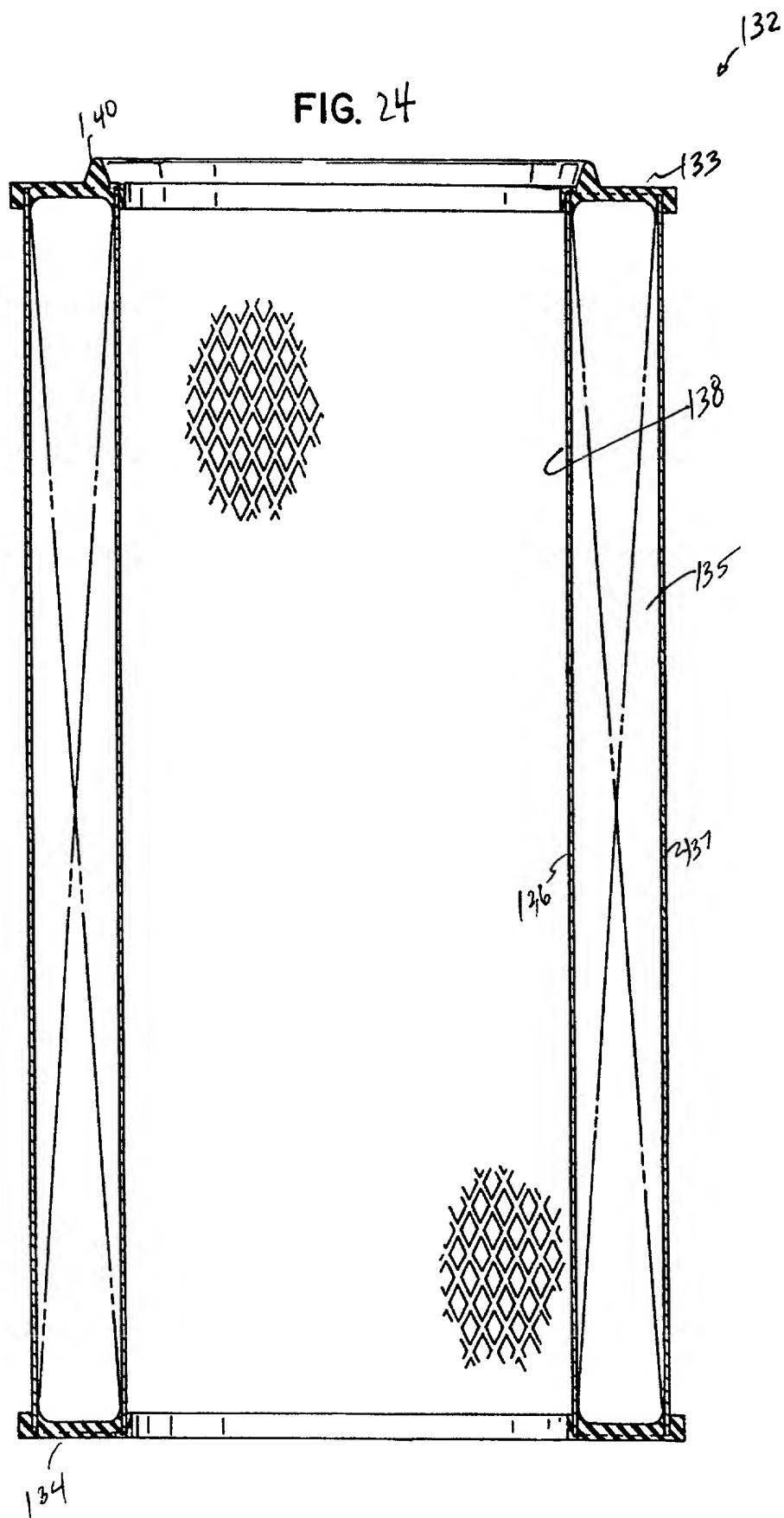


FIG. 23

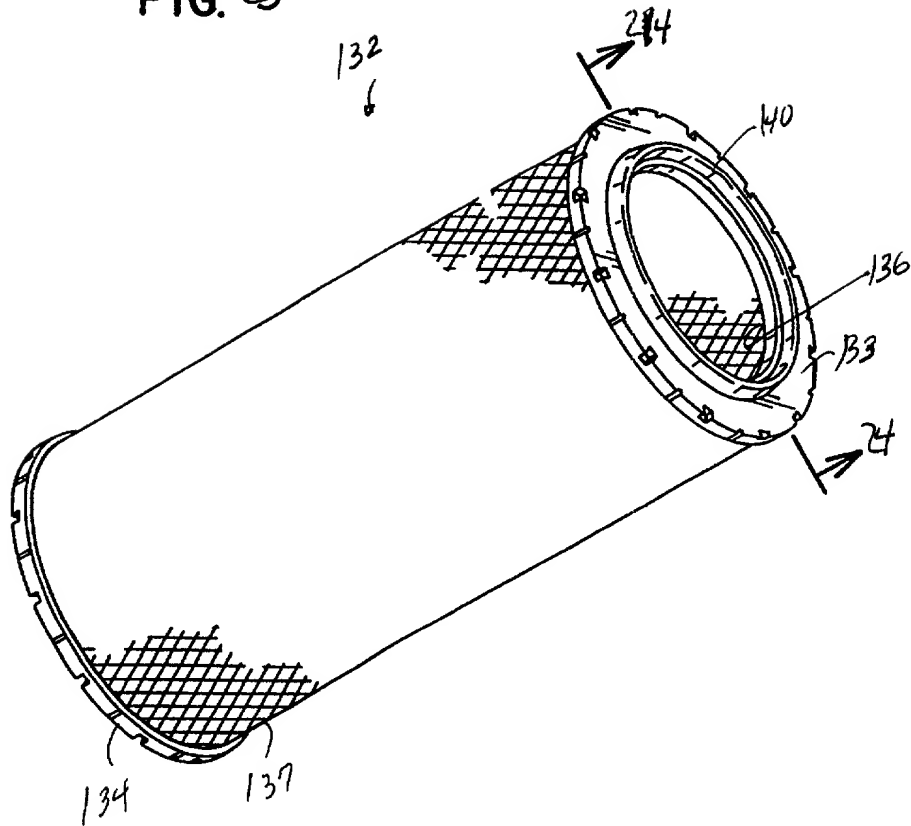


FIG. 25

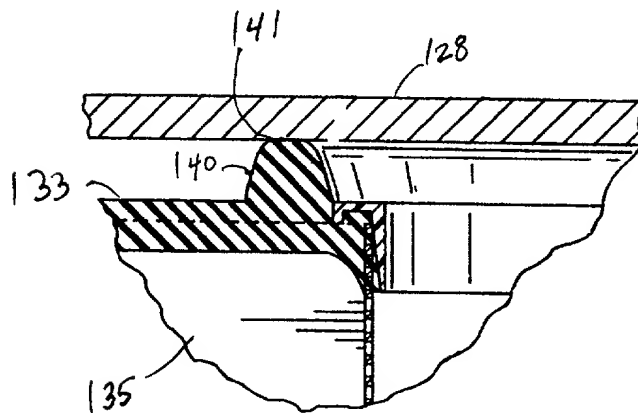


FIG. 26

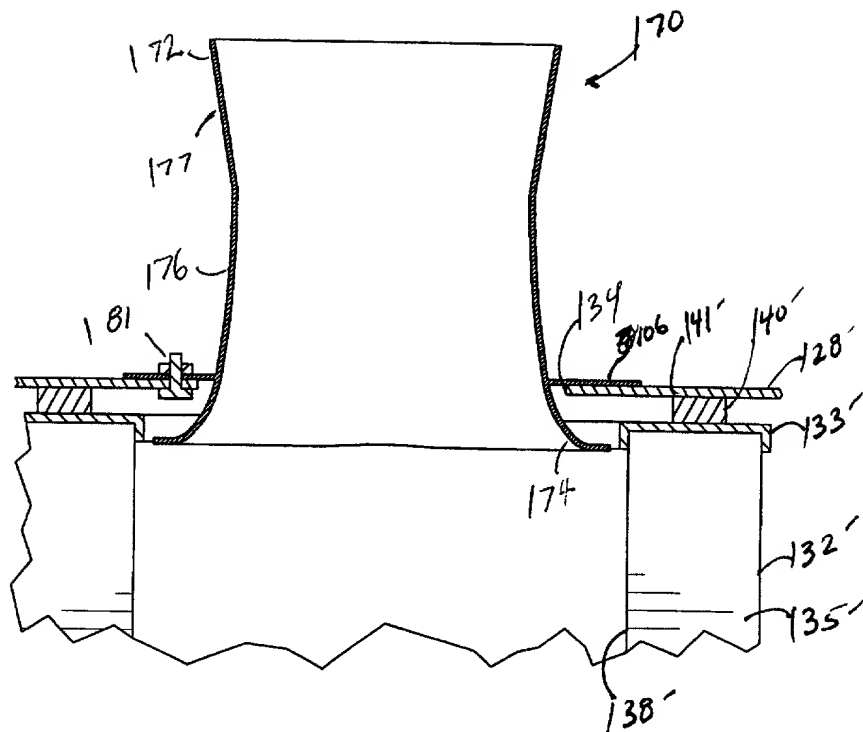


FIG. 27

